



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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MEMORANDUM

DATE: December 17, 2009
TO: Board of Environmental Protection
FROM: Tom Danielson, Bureau of Land & Water Quality, Augusta
RE: Chapter 583. Use Attainment Evaluation Using Nutrient Criteria for Surface Waters

The Department withdrew Chapter 583 from the original rulemaking process on October 1, 2009 because a number of people that submitted oral and written testimony requested additional public stakeholder meetings. In response, the Department held two full-day, public stakeholder meetings on October 1 and 13, 2009. The Department sequentially presented sections of Chapter 583, described methods and rationale, answered questions, and solicited comments and recommendations. At the request of stakeholders, the Department did a substantial amount of additional data analysis to support the decisions about setting total phosphorus (TP) and environmental response criteria. Following the stakeholder meetings, the Department solicited additional written comments, recommendations, and suggested criteria thresholds. At the end of the process, stakeholders indicated that more meetings were not necessary.

Participant List

- Houlton Band of the Maliseet Indians
- Penobscot Indian Nation
- Augusta
- Bangor
- Brunswick
- Jay
- Lewiston - Auburn
- Portland
- Verso Paper
- Acheron Engineering
- Maine Rural Water Association
- Maine Pulp and Paper
- Natural Resources Council of Maine
- Woodard and Curran
- U.S. Environmental Protection Agency, Region 1
- Western Michigan University

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Key Changes to Chapter 583 in Response to Stakeholder Recommendations

- The Department converted the Diatom Total Phosphorus Index (DTPI) from an environmental response criterion to an alternative method of measuring TP concentrations. The DTPI uses data from one sample of algae growing on the bottom of a stream or river reach to estimate TP concentrations. This will provide the Department flexibility in monitoring TP concentrations, because it is logistically easier to collect one algal sample than the three to seven water samples necessary to calculate a mean TP concentration (see Section 4).
- The Department added Section 7 to provide clarity about how the Department will list waterbodies as impaired in the Integrated Water Quality Monitoring and Assessment Report.
- The Department added Section 8 to provide clarity about how it will integrate nutrient criteria into the process of setting phosphorus limits in pollution discharge permits.
- Removed Table 2 because it was redundant with Table 3.
- Based on the additional data analysis, the Department changed the following criteria limits compared to last summer's version (see new Table 2):
 - Total Phosphorus
 - Class AA/A changed from 20 ppb to 18 ppb.
 - Class B changed from 33 ppb to 30 ppb.
 - Class C changed from 37 ppb to 33 ppb.
 - Secchi disk depth
 - Added the option of using Secchi disk depth to Class AA/A, B, and C.
 - Chlorophyll *a*
 - Impounded Class A changed from "spatial mean of 3.5 ppb and no value greater than 5.0 ppb" to a single criterion of "5.0 ppb".
 - Percent algal cover
 - Class B changed from 30% to 25%.
 - Class C changed from 40% to 35%.